

A3 heating phase. Immediately after the heating phase that lasts until a previously calculated maximum temperature has been reached, a cooling phase in which the temperature of a product decreases is commenced, such that a maximum quantity of pasteurisation units (PU) to be applied for the pasteurisation of the specific product is first computed, and the temperature variation in the heating phase, the length of the heating phase, and the temperature variation and length of the cooling phase, are then chosen so that during pasteurisation, the number of pasteurisation units previously calculated corresponds to the total number of pasteurisation units actually applied during the heating and cooling phases.--

IN THE CLAIMS:

Please cancel claims 1-8 without prejudice.

Please enter the following newly added claims 9-20.

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Claim 9. (Newly Added) A method for the pasteurisation of drinks, comprising a heating phase in which a flow volume of a drink product is heated above a pasteurisation temperature and a cooling phase in which the heated drink product is cooled before being filled into a container, wherein the cooling phase is commenced immediately after a previously calculated maximum temperature has been reached in the heating phase, and wherein a maximum quantity of pasteurisation units (PU) to be applied for the pasteurisation of the drink product is computed, and then a temperature variation and length of the heating phase, and a temperature variation and length of the cooling phase are chosen, such that during pasteurisation, the number of pasteurisation units previously calculated corresponds to the total number of pasteurisation units actually applied during the heating and cooling phases.

Claim 10. (Newly Added) A method for the pasteurisation of drinks according to Claim 1, wherein the pasteurisation unit is defined as:

$$PU = t_h * 1,393^{(9h-92)}$$

wherein t_h represents heat holding time, θ_h represents heat holding temperature, and θ_2 represents pasteurisation temperature, respectively.

Claim 11. (Newly Added) A method for the pasteurisation of drinks according to Claim 1, wherein the time length of the heating phase in a temperature range within which pasteurisation takes place is shorter than that of the cooling phase.

Claim 12. (Newly Added) A method for the pasteurisation of drinks according to Claim 1, wherein in the heating phase a stream of the drink product is heated in a recuperator by heat transfer from outflowing the product stream.

Claim 13. (Newly Added) A method for the pasteurisation of drinks according to Claim 1, the heating phase includes a first heating phase in which heating lasts until the temperature of the drink product reaches just above the pasteurisation temperature, and a second heating phase in which heating lasts until the temperature of the drink product reaches the calculated maximum temperature.

Claim 14. (Newly Added) A method for the pasteurisation of drinks according to Claim 13, wherein the second heating is performed by a medium with a higher temperature than that of the drink product.

Claim 15. (Newly Added) A method for the pasteurisation of drinks according to Claim 14, wherein the medium includes hot water and steam.

Claim 16. (Newly Added) A method for the pasteurisation of drinks according to Claim 13, wherein a first heater is used in the first heating phase, and a second heater is used in the second heating phase.

Claim 17. (Newly Added) A method for the pasteurisation of drinks according to Claim 16, wherein the first heater is a recuperator.

Claim 18. (Newly Added) A method for the pasteurisation of drinks according to Claim 12, wherein the cooling during the cooling phase partially takes place in the recuperator, with the outflowing drink product stream to be-cooled flowing counter-current to the inflowing drink product stream to be heated.

Claim 19. (Newly Added) A method for the pasteurisation of drinks according to Claim 1, wherein the drink product stream is cooled in a heat exchanger by means of an outside medium.

Claim 20. (Newly Added) A method for the pasteurisation of drinks according to Claim 1, wherein the drink product includes beer.

IN THE ABSTRACT

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Please accept the following Abstract of the Disclosure in re-written "clean form".

--ABSTRACT OF THE DISCLOSURE

The present invention relates to a method for the pasteurisation of drinks, in particular beer, by thermal treatment, in which before being filled into its containers a flow volume of the product is heated above a pasteurisation temperature and then cooled again, such that immediately after a heating phase which lasts until a previously calculated maximum temperature has been reached, the cooling phase with decreasing product temperatures is commenced. In the method according to the invention there is no heat holding period during which the temperature is held constant. The method enables a high product temperature to be reached without exceeding the limits specified for the pasteurisation units applied.--